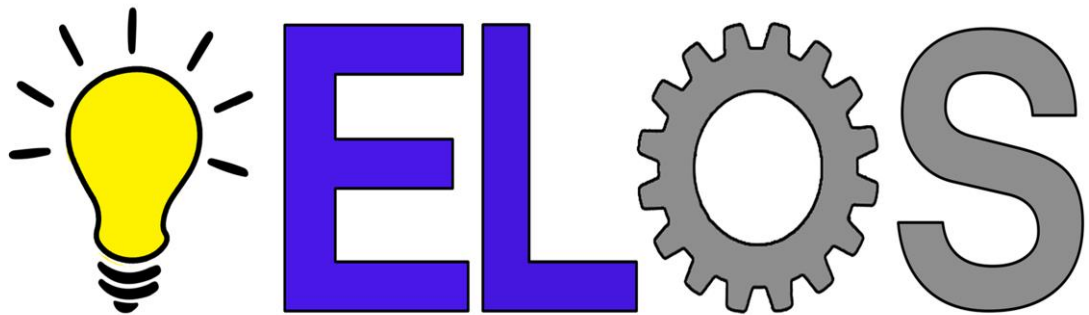


**COMPANY  
REPORT  
2016/2017**



**Together we build the future**

[www.elos-ta.sk](http://www.elos-ta.sk)

ELOS JA COMPANY /Country: Slovakia/

/Link teacher: Mgr. Valentína Kaljužna/

/Business adviser: Mgr. Milan Kysel', Mgr. Oleksandr Kaljužnij/

# Executive summary

**Company name** ELOS

**Country** Slovakia

**Motto** Together we build the future

**Contact** [www.elos-ta.sk](http://www.elos-ta.sk)

[www.facebook.com/ELOS-JA-FIRMA](https://www.facebook.com/ELOS-JA-FIRMA)

## Mission statement

A satisfied customer has his property always under control.

## Product

We, the students of JA Company at Technical academy in Zvolen, did a survey among 500 people and we found out, that relatively a large number of the surveyed population lives in a family house or owns a garden. One third of the surveyed population is devoted to agriculture. But everyone wants to keep their property protected and under control. That is the reason why we decided to offer the consumer a product that is based on the real need to control space in which there is some human or animal movement. We created MIOS - Modular Intelligent Protection System, a device that detects motion in the monitored object and sends the information to the owner of the property. In the beginning we created a basic version of the product which contained a motion sensor and a bell. During the development, we have expanded our range to additional modules: a photodetector, a camera system, the programmability of sensors and a transceiver. Our product is easy to use. Customers can create their own version using imagination and we will make it to measure.

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## Marketing

The marketing of our company focused on the promotion, providing of information and visibility using a website, social sites like Facebook, a large information board on the campus and newsletters.

## Financial results

**Costs: 864,00€**

**Turnover: 1191,50€**

**Corporation Tax Payable: 68,77€**

**Net profit: 258,73€**



*MIOS can't be missed  
in any household*

# The main product

*Technology can bring benefits to every area of our life*

## MIOS

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### Modular Intelligent Security System

MIOS is a product that is based on the real need to control space where it is expected, that there might be people or animal movement whose presence is not desired. The main aim of the product is to design a device that will actually perform functionality for which it is intended. It must also meet the demanding needs of its broad-spectrum use in various conditions and reflect the requirements of the widest number of customers. So we decided to create a modular system that can allow each customer put together the final product based on their needs and in the most ideal form.

The possibility of further development and adaption to its further use makes MIOS unique. It is even possible to use the modules at different locations so we can create a secure area with a lot of functionalities. This 21st century product is very simple in its nature. It is made of ecologically processed and then recycled PET - bottles, which helps our environment and is ECO-friendly.



*It sees more perfect than the human eye and can capture every move*

MIOS is a device which detects, monitors and records motion in a monitored area and sends information to the owner of the property.

MIOS contains two parts – outside – exterior and inside – interior, which communicate with one another wirelessly. These parts can be located in 600m distance from each other.

The exterior part is multi-function and modular, it can contain more modules and perform more functions. The choice is on the customer.

The powering of the device is implemented by two modules: the battery module, in which are Li – on batteries and a rechargeable module, which contains photovoltaic cells. For charging, the device uses alternative source of energy – the Sun and it doesn't need electricity.

You have the choice of these basic modules:

- a) The radar detector, which can contain more radars. Each is software programmable, it is so sensitive that it can distinguish between man and animals. When the detector monitors some kind of motion the interior device sends a sound signal.
- b) The light module and photo sensor. The light module is in two versions – it lightens up when it gets dark or when it monitors some kind of motion. The photo sensor helps save the energy. The sensor can recognize whether it is day or night.
- c) The label light module is used for illuminating the companies name, house number or some advertisements.
- d) The bell module: after pressing the bell button the interior device sends a loud signal, which is different from the motion signal.
- e) The camera system: a widescreen camera provides the customer a picture from the camera by the interior unit, a smartphone or a computer.
- f) The meteorological unit module monitors the information about the temperature and humidity and sends it to the interior unit.

The interior unit may contain a display, but it depends on the needs of the customer. In the future the interior unit will be able to communicate by wi-fi with a smartphone or a computer program. It will also contain a slot Micro SD for saving photographs and

videos. The interior receiver may be designed as a PAGER.

The communication between the transmitter and the receiver is wireless. For sending short messages or picture messages you will need a SIM card (phone card). It is all designed by your needs.








**M** - easy assembly and disassembly, by any person because it is **modular**. Each customer may choose a design according to his own imagination, of course, in a way that is realistically achievable.

**I** - an **intelligent** internal control system, which is of course adapted to each customers needs, so that all functions and justification are not meaningless and each part functions exactly and for a long time.

**O** - security and monitoring facilities for the purpose of signaling movement of people and animals in the guarded area.

**S** - a **system**, which is unique as a whole, the uniqueness of the product competitiveness.

The description of particular modules:

-  **Module 1** - The battery module
-  **Module 2** - The recharge panel designed by means of photovoltaic panels
-  **Module 3** – The radar detector with illumination
-  **Module 4** – The bell button with a tag
-  **Module 5** – The oblique label illumination
-  **Module 6** – The camera system
-  **Module 7** – The photo sensor with photovoltaic cells, detects whether it is day or night, thereby saving electricity during the day.

*We have an idea!*

*Creating real results based on a simple idea*

**Our offer of the basic MIOS version and our expanded MIOS version.**

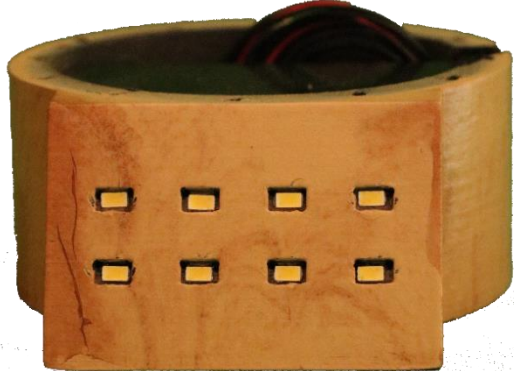
The **basic version** includes a motion sensor and a bell. The bell has a transmitter that sends a signal to a distance of 600 m in ideal conditions, a battery module and solar charging. Thus, the device is self-sufficient and needs no electrical connection or permanent exchange of batteries.

The **extended version** differs from the basic version by its multifunctionality. This version can contain multiple radars of movement. Each radar is software-programmable. The radar detector works on the principle of Doppler effect which makes it work with a very quick feedback response. The reporting of movement occurs in a very short time - 200ms. The second option is to extend the MIOS camera system. The camera system can provide a photo and video documentation. The third option is to place a programmable chip into the device with an application of controlling MIOS by your mobile phone.

*I'm willing to discover new possibilities*



The bell button



The kamera system



The radar detector with illumination



The MIOS hold

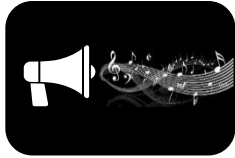


The battery module



The charging module

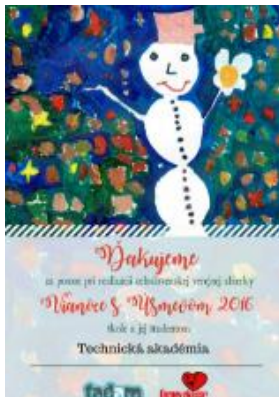
Indoor display



The individual parts of Mios are printed on a 3D printer. After printing they are black in color. The customer can choose any color and effects. We provide colorful design of the product using a hydro foil.

## *Determined to help*

### Public fundraising Smile as a gift



*The idea of doing what we love the most leads us from the beginning to the end*

### Figures and key chains from used machine parts

In the 21st century it has become popular and especially modern to give metal products a new life. Our key chains are made of a disposal bike chain, to which we added a new look. Our key chains will please the eye of every generation. To produce metal characters we used more materials and components that waited for new uses.



# Marketing

*We are moving further together*

Since the beginning of our company we have dealt with the production and sale of our products. But the main objective was to produce a product that would be useful, innovative and visually appealing. Then we made a first survey at our school and we found out an interesting fact that 80% of our pupils live in the countryside, have a garden or farm animals. Hence, the idea to produce a device that will monitor a larger area was born. Therefore, our survey spread outside of school. From 500 respondents 180 own a house, 387 own a garden and 150 were farmers. But everyone would like to know about what's happening on their property and have it under control.

**MIOS** detects motion in the monitored area and sends the information to the owner of the property. In the beginning of our bussiness we made a prototype, which serves as an advertising model. Subsequently, we received three orders that we have successfully implemented. We produced MIOS in cooperation with other companies.



## Promotion

For promotion we used our website [www.elos-ta.sk](http://www.elos-ta.sk) and Facebook page [www.facebook/elos-ja-firma](http://www.facebook/elos-ja-firma). The sites provide information about the company and its products. We also realized the propagation at our school by a presentation panel. During the visit of the Deputy Prime Minister for investments and informatization Peter Pellegrini and mayor of Očová in our school, we presented our main product, after presentation they ordered 4 MIOS to fight against illegal dumps.



## Price

In the formation of price, we have included the costs of production and research. Then we included the costs of the material. The price depends on the kind of modules that will be preferred by the consumer.

Module 1- Battery cover 30€

Module 2- Charging 47,88 €

Module 3- Illumination 8€

Module 4- Label button 30€

Module 5- Obliqu label illumination 5€

Module 6- Camera system 60€

Module 7- Photosensor 4€

Module 8- Indoor display 35€

# Analysis of Cooperation and partnership overall performance and profitability



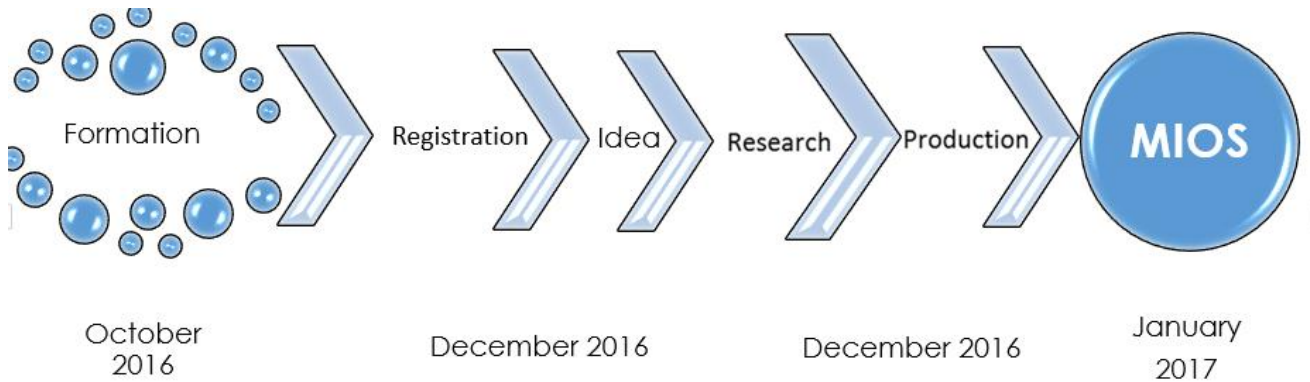
Consultants of our company.



MIOS development partners.



Grafic design of the webpage.





# Financial analysis

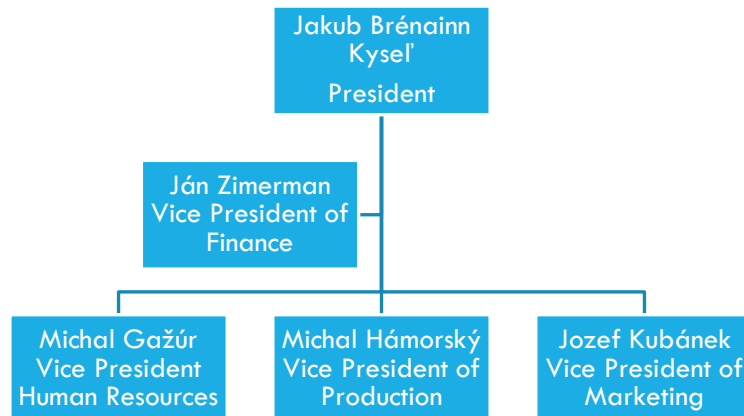
*On the level of numbers*

20. 04. 2017

Profit and Loss Account		Balance Sheet		
A	Sales	991,50€	Current Assets:	
B	Purchases	517,00€	Stock	0,00€
C	Production Wages	30,00€	Debtors	0,00€
D	Closing Stock	0,00€	Cash at Bank	0,00€
E	Cost of Sales (B+C-D)	547,00€	Cash in Hand	477,50€
	( A-E)	444,50€	(A) TOTAL CURRENT ASSETS	477,50€
	<b>Gross Profit</b>		Less:	
F	Salaries, Commissions and Bonuses	10,00€	Current Liabilities:	0,00€
G	Stationery	7,00€	Bank Overdraft	0,00€
H	Rent & Hire	0,00€	Loans	0,00€
I	Miscellaneous Expenditure	285,00€	Creditors	0,00€
J	Registration Fee	15,00€	Corporation Tax Payable	68,77€
	Total expenses ( F+G+H+I+J)	317,00€	VAT Due	0,00€
K	Gross Profit Less Total Expenses	127,50€	(B) TOTAL CURRENT LIABILITIES	68,77€
	<b>Operating Profit (or Loss)</b>			408,73€
L	Miscellaneous Income	200,00€	(C) BALANCE (A-B)	
		327,50€	Represented by:	
M	<b>Net profit (or Loss) (K+L)</b>		(D) Issued Share Capital:	
N	Corporation Tax Payable 21%	68,77€	3€ x 50 shares at 150 €	
		258,73€	( E ) Profit & Loss Account ( Profit after Tax )	258,73€
O	<b>Profit after tax ( M-N)</b>			408,73€
P	Appropriations of Profit (Q+R+S):	258,73€	( F ) Shareholders' Fund ( D+E )	
Q	Dividends:	140,00€		
R	Donations:	100,00€		
S	Offer:	18,73€		
	<b>Balance (s hould be nit) (O-P)</b>	0,00€		

# Company management

*Meet us!*



The efficiency of our company lies in the leading of the company to purposefulness and success and transparent functioning of the four sections - production, finances, marketing and human resources.

The management of ELOS JA Company:

## Future

*Development is the  
way*

As well as now, in the future, we plan to bring innovative solutions to property and human protection not only in Slovakia but also in the interstate sphere.

Our goals for the future have already been set:

*The main aim is to create  
not only to sell*

### **Inovatin of the main product**

Our product is already a breakthrough in the world of security devices, however this does not stop us from constantly improving and innovating MIOS.

### **Start up an internet e-shop**

Get with our internet shop on a higher level compared to the competition.

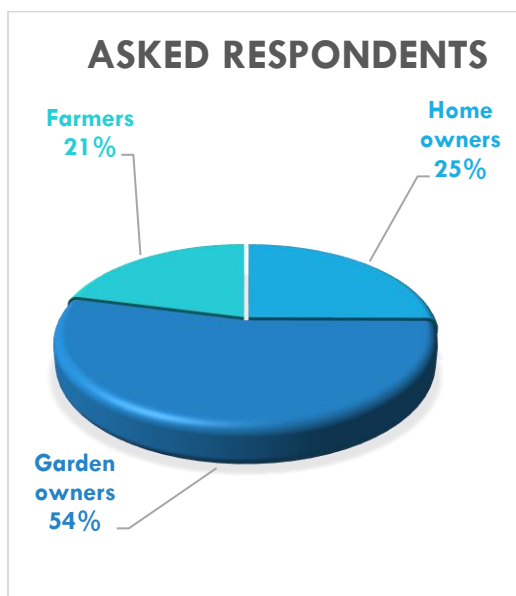
### **Run the interstate sale of our product**

One of our goals is to sell MIOS worldwide and become a "Great power" in the world of security devices.

### **Bring to the market other innovative security devices**

Our team intends to study the development of devices similar to MIOS.

# Addition



From 500 asked:

1. Do you own home?
2. Do you have garden?
3. Are you a farmer?

## Our thanks belongs to

Junior Achievement Slovakia n.o.

Technical academy Zvolen

UniNet Csl a.s.

Promo design s.r.o.

Agro Stud Javorie s.r.o.

Sinec s.r.o.

Klemo s.r.o.

SOS electronic s.r.o.